

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014603**Date Inspected:** 27-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Yu Dong Ping		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No
Rod Oven in Use:	Yes	No
Weld Procedures Followed:	Yes	No
Verified Joint Fit-up:	Yes	No
Approved WPS:	Yes	No
Delayed / Cancelled:	Yes	No

Bridge No: 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005842

Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

LIFT – 4, TOWER STRUT ANGLE PLATE

WD1 – SA4 – 56 – 127M – 4

SD1 – SA4 – 56 – 127M – 4

ND1 – SA4 – 69 – 119M – 4; 8

SD1 – SA4 – 56 – 119M – 1; 2

WD1 – SA4 – 56 – 119M – 1; 2

This QA Inspector observed the following work in progress

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Shielded Metal Arc Welding (SMAW):

Weld joint # 47A located on Tower Strut WD1 – STSA4 – 5 – 139M – 1. Welder is identified as 040619. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.

Weld joint # 8A located on Tower Strut SD1 – STSA4 – 5 – 139M – 1. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2212 – Tc – U5b.

MEASUREMENTS ON VERTICAL TRIAL ASSEMBLY WEST TOWER LIFT-1

This QA Inspector carried out the measurements on West Tower Lift-1 Exterior side to check the distance from the edge of the base plate anchor bolt holes to the side of the type-2 bearing stiffeners for skin 'A'; 'B'; 'D'; 'E'. Measurements were recorded on the data sheet and submitted to the assigned task leader.

This QA Inspector observed the following work not in compliance:

Description of Incident:

During the Quality Assurance Inspection of Anchor Bolt Hole to Bearing stiffener distance measurement at West shaft Skin D External side, this Quality Assurance Inspector (QA) discovered the following issue:

- Type 2 Bearing stiffeners are overlapping on top of anchor bolt hole.
- Type 2 Bearing stiffeners to Anchor bolt hole distances at five (5) different locations found approximately -2 mm, -2mm, -3mm, -4mm, -4mm.
- The Anchor bolt holes found inappropriate readings are consecutive from Skin 'C' side. (For readings see above)
- These bearing stiffeners are found in Skin C of External West Shaft Lift 1.
- The location is Skin D, near CD Corner.

Applicable reference:

RFI 2024 – “To facilitate fabrication and to avoid rework, the distorted (interior) bearing stiffener PL #2 's in Lift 1 East Shaft are acceptable as fit-for-purpose, provided that all of the following conditions are met:”

“1. Bearing stiffener PL #2 shall not conflict with the anchor bolt holes in the base plate...”

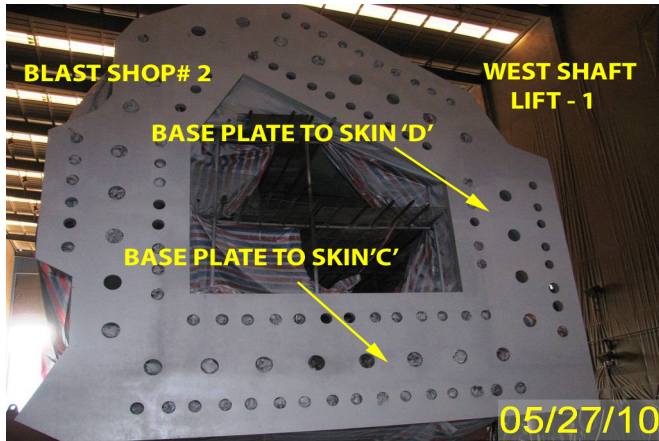
This QA notified ZPMC QC identified as Mr. Qiu Wen and ABF inspector identified as Mr. Bi Dewei of the above issue and that an incident report will be generated.

See attached photos:

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Sandeep

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer